

Gunnison Gorge National Conservation Area & Wilderness

**Manager Report
FY 2007**

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GUNNISON GORGE NCA & WILDERNESS (CO154)

2007 Annual Manager's Report

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Total NCA Acreage: 62,844 acres including 17,784 acres within the Gunnison Gorge Wilderness Area

Counties within the NCA: Montrose and Delta Counties

Congressional District & Representative: CO03
U.S. Senator Wayne Allard,
U.S. Senator Ken Salazar,
U.S. Congressman John Salazar

Section 1

Background Information on the Gunnison Gorge NCA & Wilderness

The Gunnison Gorge NCA, located approximately 10 miles northeast of Montrose, Colorado, was designated in the [Black Canyon of the Gunnison National Park and Gunnison Gorge National Conservation Area Act of 1999](#) (Public Law 106-76). The [Black Canyon of the Gunnison Boundary Revision Act of 2003](#) (PL 108-78) expanded the NCA from 57,725 acres to 62,844 acres. The NCA is part of the Uncompahgre Field Office (UFO) located in Montrose.

The process for designating the National Park and NCA was a long, hard-fought battle which spanned fourteen years and involved hundreds of public, interagency, and user group meetings. Major topics of controversy included water rights, instream flow protection, wild and scenic river designation, off-highway vehicle use, BLM multiple use management vs. National Park Service preservation, and Park expansion.

The NCA encompasses diverse landscapes including dramatic and unusual adobe badlands formations, sprawling sagebrush flats, rugged oak brush and pinyon-juniper covered slopes, and colorful canyons surrounding the spectacular Gunnison Gorge river canyon.

These landscapes support an equally diverse range of uses and activities such as Wilderness whitewater boating and fishing, small and big-game hunting, off-highway vehicle, mountain biking and equestrian use, domestic sheep and livestock grazing, sightseeing, wildlife photography, and hiking and backpacking. Annual visitation to the NCA is approximately 90,000 visitors.



NCA Program Management

Gunnison Gorge Wilderness

The Gunnison Gorge Wilderness, located in the heart of the NCA, encompasses 17,784 acres and 14 river miles of the main Gunnison River corridor. The Wilderness is the geologic continuation of the Black Canyon of the Gunnison National Park. Like the Black Canyon, the Gorge contains massive, towering black Precambrian granite walls and spires composed of the earth's ancient "basement" rocks which date back 1.7 billions years.

Unlike the Park, the Gorge is a double canyon system, and, in addition to the narrow, inner, dark canyon, there is also a broad, spacious outer canyon composed of multi-colored sedimentary rocks that contain spectacular examples of faults, drapes, unconformities, and other geologic features not seen in the Park.

The Gunnison Gorge is famous for technical (Class III-IV) and remote rafting and kayaking experiences and outstanding Gold Medal trout fishing. The annual June stone fly hatch attracts fishers from all over the world. Colorado Division of Wildlife (CDOW) 2006 fish sampling results show the Gorge's trout biomass is 600 pounds of trout per mile; **10 times the**

amount required for Gold Medal Trout Fishery designation.

Articles in many outdoor magazines tout the Gunnison Gorge as one of the best trout fisheries in the nation. Increased national publicity, along with aggressive advertisement and promotion by commercial companies, tourism groups, and local businesses about the Gorge's extraordinary scenery and fishery is resulting in increased



visitation and management concerns. Wilderness visitation has more than quadrupled in the past 15 years to over 15,000 annual visitors.

Although 15,000 visitors per year might not seem high, it's important to understand that the Gorge is a very narrow, linear and steep canyon, with limited accessibility. There are very few open areas that can safely accommodate large groups of people while providing outstanding opportunities for solitude in accordance with Wilderness mandates.

It does not take many people, either fishing from shore or boating through the canyon, to make the area appear crowded and negatively impact visitor experiences and Wilderness qualities.

In order to maintain the area's significant Wilderness values, the BLM enforces strict backcountry regulations including group size limits, commercial use allocations, maximum stay lengths, designated campsites, no wood fires, and mandatory human waste pack out systems.

Under the Gunnison Gorge Resource Management Plan (RMP) the Wilderness is divided into four management zones based on desired physical, social, and managerial settings and targeted user experiences and benefits.

Each zone has its own carrying capacity limits for the number of visitor encounters during off-season, primary season, and special high use periods (June Stone Fly Hatch, weekends, and holidays).

Checking for user compliance with Wilderness regulations is time-consuming, difficult, and very costly due to the Gorge's remoteness. River patrols, conducted by seasonal river rangers, require horse pack-ins and vehicle shuttles. BLM safety regulations require a minimum of two river rangers per trip. In order to effectively cover the river season and provide days off, at least four river rangers (two teams) are needed.



Total salary costs for UFO and NCA river rangers average \$86,000/yr. Their vehicle costs average \$18,000/yr. Training, per diem, shuttles, and horse pack-ins cost an average of \$27,000/yr.

In addition to river patrols, the rangers also: implement resource protection projects; coordinate volunteer opportunities; and provide visitor services including search and rescue, interpretation, and environmental education.

Besides working in the NCA, the seasonal rangers also patrol, conduct permit compliance, and provide visitor services on other UFO rivers and NLCS areas including the San Miguel River, Dolores Wilderness Study Area (WSA), Lower Gunnison River, and Dominguez WSA.

Wilderness Fee Area



The Gorge was one of BLM's first recreational fee demonstration pilot sites and has been charging fees for day and overnight Wilderness permits since 1998. A Fee Work Group, sanctioned by the Southwest Resource Advisory Council assisted BLM in developing

various scenarios for collecting fees and priorities for spending the fees.

Fees apply to all commercial and private boaters and walk-in users 16 years of age and older. The day use fee is \$3 per person; camping fees are \$10/person for one night and \$15/person for two nights. Annual day use passes are \$15. Volunteers can earn a free annual pass by working a minimum of four hours on a resource protection or education project.

In 1999, the Gorge was one of 40 BLM fee sites nationwide that administered the National Recreational Use Customer Survey. Findings from the survey indicate that the majority of respondents agreed that the use fee charged in the Gorge is "about right" and was equal to the value of the recreational experience.

Fee collection has averaged approximately \$25,000 annually. Major uses of fees include: maintenance of trailhead facilities; horse pack-ins and shuttles for river patrols; vehicle and seasonal per diem costs; swift water rescue and backcountry EMT training; bio-monitoring; and control of tamarisk and other invasive species.

In 2007, new fee boxes and signs were installed at the Wilderness trailheads to meet new BLM and Federal Lands Recreation Enhancement Act requirements for Special Recreation Permits.

OHV Management

The NCA legislation has special provisions for off-highway vehicle (OHV) use which allow for some cross-country vehicle use in the NCA. The 2004 RMP set new NCA travel management regulations which reduced the acreage of "open" areas by 94 percent; increased "limited" areas by 36 percent and increased "closed" areas by 7 percent. The Plan designated a 9,700-acre OHV Special Recreation Management Area (SRMA) containing lands both inside and adjacent to the NCA. The SRMA includes a 900-acre "open play" area within the NCA and over 100 miles of designated multiple use trails

The NCA partners with Colorado State Parks to jointly fund an OHV trail crew through the Park's OHV Trail Program and BLM's



Challenge Cost Share program. In 2007, the OHV crew was granted "Good Management" status making it eligible to receive \$50,000 a year from the Trails Program.

A major workload of the OHV crew is implementing travel management regulations which involve extensive trail and boundary signing, user education, and coordination with law enforcement and adjacent landowners.

Signing travel management areas and routes is an ongoing and costly challenge as many signs are vandalized or stolen. **The annual cost for OHV signing averages \$8-\$10,000 a year.**

Other duties include: trail and bridge maintenance/repair, construction of information and regulation kiosks; use and impact monitoring; development of trail maps and user education materials; visitor contacts; and training OHV riders in safety and use ethics.



In 2006, the Peach Valley Recreation Site; which provides OHV users picnic tables, trailer parking, loading ramps, restrooms; and a training area was constructed.

In 2007, the OHV crew constructed an obstacle course in the training area, as well as a beginner's

loop at the site which provides a safe place for users to try out their equipment and skills before hitting the NCA's challenging network of trails.

Rangelands, Woodland & Watershed Management

Varied topography, geology and soils in the NCA result in a range of vegetation types and plant communities. Mancos Shale derived soils on the western edge of the Area support a unique plant community dominated by several saltbush species, Salina wild rye and bottlebrush squirrel tail, and numerous endemic forbs.



To the east, increasing elevation and a transition to courser soils sustain pinyon-juniper woodlands along with pockets of galleta grass, needle and thread grass,

Utah serviceberry, and mountain mahogany. Riparian areas are made up of sandbar willow, reed canary grass, spike rush, and scattered box elder and hackberry.

The highest elevation areas contain mountain shrub communities dominated by Gambel's oak brush, Utah serviceberry and squaw apple. These communities transition into mountain big sagebrush parks dissected with pinyon-juniper wooded canyons.

Approximately 5,644 AUMs of cattle and sheep grazing occur on 11 allotments throughout the NCA. NCA grazing permits contain special stipulations requiring visual setbacks for livestock grazing activities (bedding grounds, water sties, supplemental feed sites, etc.) from recreational sites and major access routes. In 2000, the NCA added 4,700 acres along the Gunnison River formerly used for private grazing. The area is now managed as a grass bank to promote restoration and recovery.

Salinity control structures to reduce salinity in the Colorado River Basin were developed in Elephant Skin Wash, an extensive adobe badland area located in the southernmost portion of the NCA.

The BLM has been working with science partner, the U. S. Geological Survey (USGS), since 2002 on numerous research projects related to



Mancos Shale geomorphology to determine best management practices (BMPs) for Mancos areas that cover over 16,000 acres of the NCA.

Vegetation and watershed management issues in the NCA concern weed invasions; dominance of the landscape by late seral plant communities due to absence of fire; and selenium and sediment production from surface-disturbing activities and annual "monsoon" events resulting in high runoff and erosion in Mancos areas.

Cheat grass, salt cedar, yellow toadflax and Russian knapweed threaten the river corridor, roads and trails, and lower elevation plant communities. Lack of fire has resulted in the spread of pinyon-juniper communities into the shrub and grass communities resulting in urban interface problems and wild land fire concerns.

Wildlife & Fisheries Management

The NCA provides habitat for many wildlife species including: mule deer, elk, mink, bighorn sheep, mountain lions, black bear, bobcats, coyotes, beaver, red fox, ringtail cats, prairie dogs, rock squirrels, weasels, cottontail rabbits, and white-tailed jackrabbits. Reptiles include: faded midget rattlesnakes, bull snakes, and collared lizards.

Larger bird species include peregrine and prairie falcons, kestrels, golden and bald eagles, osprey, turkey vultures, great horned owls, burrowing owls, and red-tailed hawks. Gunnison Sage grouse are found in the open sagebrush grassland parks on the mesa tops east of the Gorge, and chukar partridge are present within the Gorge and NCA badland areas.



BLM, Colorado Division of Wildlife (CDOW), the Habitat Partnership Program (HPP) and U.S. Fish and Wildlife Service (USFWS) coordinate on NCA wildlife habitat and species management programs.

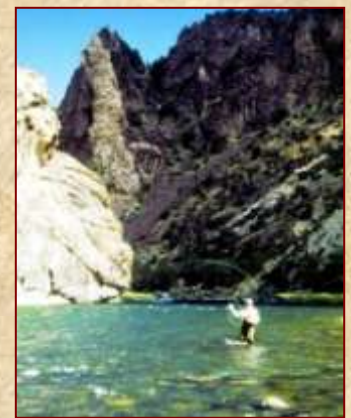
The goal is to maintain healthy native wildlife populations within the habitat's carrying capacity, and reduce conflicts between big game animals and private land interests. Work includes: riparian protection projects, sage grouse and big game habitat improvement projects, vegetation monitoring, and habitat assessment work.

Thirty-three miles of the Gunnison River, from the upstream boundary of the Black Canyon National Park to the Relief Ditch Diversion above the NCA boundary near Austin, are protected as a Gold Medal Trout River.

The major game species include rainbow and brown trout. Non-game species, such as suckers, sculpins, and the state-sensitive round-tail chub, are also present.

Over the last decade, whirling disease has caused a decline in the Gorge's rainbow trout numbers. The NCA regularly assists CDOW on stocking of disease-resistant fish, monitoring and user education efforts to reduce whirling disease with the goal to re-establish the Gorge's legendary rainbow trout fishery.

In 2007, the CDOW extended Gold Medal Fishery status to seven additional miles of the Gunnison River within the NCA. The change in designation was the result of years of fish sampling which showed increasing brown trout biomass in areas below the Gunnison Forks confluence. CDOW also removed the former brown trout slot limit to allow more angling pressure on browns to reduce their competition with the whirling disease-resistant fish.



The Gunnison Forks Wildlife Management Area, at the confluence of the main and North Fork of the Gunnison Rivers, is cooperatively managed by BLM and CDOW as a "Watchable Wildlife" area and day use recreation site. With the exception of the Wildlife Area and developed recreation areas, the NCA is open to the hunting of waterfowl, upland birds, and big game. Small game hunting is becoming increasingly popular in the NCA.

BLM is implementing RMP decisions, based on concerns for public safety, that prohibit target shooting in the NCA. We also work with CDOW to monitor areas where special regulations may be needed to enhance public safety during hunting seasons.

Sensitive Species Management

BLM coordinates with the U.S. Fish and Wildlife Service (USFWS) on habitat management plans for sensitive species in the NCA. The river corridor is a concentration area for wintering bald eagles and provides nesting habitat for peregrine falcons. CDOW conducts regular monitoring of falcon eyries in both the Gunnison Gorge NCA and the National Park.

The river otters (State endangered species) were reintroduced in the late 1970s. Although reproduction has been documented, the size of the present population is unknown. The Gorge also serves as a resting area and refuge for thousands of ducks in mid-winter, as well as a nesting area for geese. Kit foxes (State sensitive species) live in the adobe badlands area of Peach Valley. Sensitive big free-tailed and spotted bats inhabit the Gorge and National Park complex.



Endangered clay-loving wild buckwheat, threatened Unita Basin hookless cactus, and sensitive plants,

Delta lomatium, Montrose penstemon, Rocky Mountain thistle, and Montrose bladderpod occur within and around the NCA.

The NCA plan designated three Areas of Critical Environmental Concern (ACEC): the Native Plant Community ACEC (3,785 acres of winterfat shrub steppe, juniper-grass savanna, and pinyon-juniper woodland communities); Fairview ACEC (Endangered and sensitive Mancos Shale plant species); and the Gunnison Sage Grouse ACEC/Important Bird Area (IBA) (22,200 acres of sagebrush habitat). The BLM works in partnership with the Colorado Natural Heritage Program (CNHP) to maintain inventories and monitoring data on sensitive plant communities.

The 22,000-acre Gunnison Sage Grouse ACEC/IBA contains a small population of birds managed under the 1998 Crawford Area Sage Grouse Conservation Plan. BLM and partners work on habitat improvement, restoration, and education projects designed to increase bird numbers, public awareness and protection of this unique species.



Cultural Resource Management

The NCA contains a number of paleo, prehistoric and historic sites including rock art, historic campsites, mines, trails and cabins. Some of the sites are eligible for listing in the National Register of Historic Places (NRHP).

The majority of the sites are in the Wilderness. Occupation of the area spans 13,000 years, as evidenced by the fluted points and sites of the Paleo-Indian hunters, including the later Archaic, Gateway, and proto-historic Ute traditions.

The remains of several historic cabins, located in the Ute Park area, date back to the late 1800s to early 1900s. Cultural surveys are ongoing as are a number of projects such as the Howell Village and Gunnison Rock Art projects



A major goal of the NCA plan is to provide users enhanced interpretation of the area's cultural resources to increase their awareness and understanding of the need to protect these special areas.

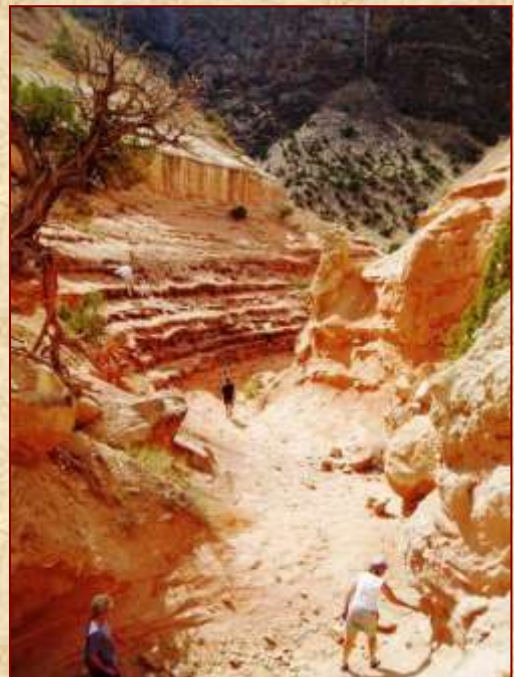
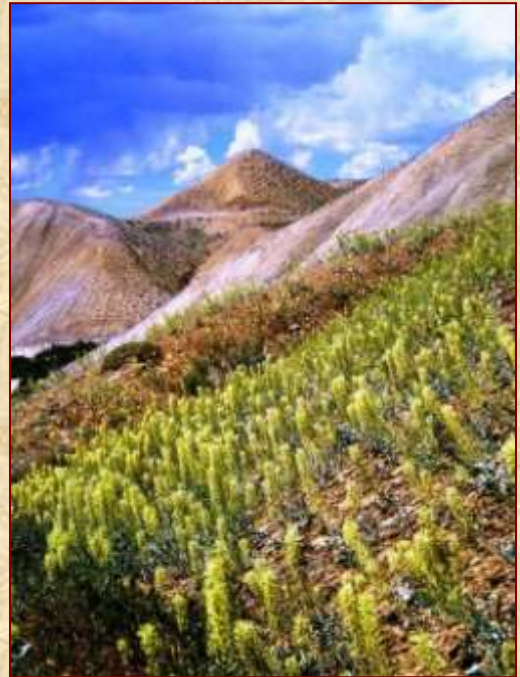
Lands Management

There are approximately 1,900 acres of private inholdings with four landowners located primarily along the NCA boundary. The Wilderness boundary cherry-stems around 320 acres near Red Canyon.

In 1999 BLM negotiated a land exchange in the Gunnison Forks area, at the NCA northwestern boundary that involved approximately 5,760 acres. These acres were added to the NCA by legislation in 2003.

The acquired lands provide additional access to the river for fishing and boating; offer additional OHV, horseback riding, hiking, hunting, and camping opportunities; and contain valuable wildlife habitat areas.

BLM is currently working with The Colorado Conservation Fund and landowners on a number of Land & Water Conservation Fund (LWCF) projects for acquisition of inholdings and conservation easements to protect scenic and sensitive resource values, provide enhanced public access and recreation, and improve resource management.





Highlights of the Gunnison Gorge NCA Resource Management Plan

- **Travel Management**

- 32 percent closed to motorized and mechanized travel
- 67 percent limited to designated routes
- 1 percent open to cross country travel

- **Wild and Scenic River Study Report**

Four stream segments totaling 28.2 miles were found eligible and suitable for inclusion into the National Wild and Scenic Rivers System.

- 16 miles (main stem Gunnison River) suitable for “Wild” classification
- 6.2 miles (Red Canyon and Smith Fork Canyon tributaries) suitable for “Scenic” classification
- 6.0 miles (main stem Gunnison River) suitable for “Recreational” classification

- **3 Areas of Critical Environmental Concern (ACEC)**

- Gunnison Sage Grouse ACEC/Important Bird Area (22,200 acres)
- Native Plant Area ACEC and Outstanding Natural Area (3,800 acres)
- Fairview Native Plant ACEC (160 acres)

- **3 Special Recreation Management Areas (SMRA)**

- Gunnison Gorge Wilderness (17,700 acres)
- Flat Top-Peach Valley OHV Recreation Area (9,754 acres)
- Gunnison and North Fork Rivers SRMA (13,502 acres) – designated to protect and enhance riparian and recreation resources

- **Benefits-Based Management (BBM)**

- The first BLM plan to incorporate the Benefits-Based Management (BBM) approach in a RMP-level document.
- Divides the NCA into 15 recreation management zones based on desired physical, social and managerial settings and visitor expectations.
- Management actions in zones are designed to deliver targeted high quality recreational activities and experiences which provide desired and beneficial outcomes to the individual users, local communities and environment.
- BLM partnered with Arizona State University on the development of BBM visitor surveys that were used to gather valuable visitor profile and input prior to the start of the planning process.

- **Incorporation of Interagency Management Plans, MOUs and Programs**

- Tri-State Energy & Transmission Corporation MOU

**NCA RMP
ADAPTIVE MANAGEMENT
PROJECTS**

- ❖ *Mancos Shale Landscape Project*
- U. S. Geological Survey, National Operations Center-Div. of Resource Services
- ❖ *Benefits-Based Management – Arizona State University*
- ❖ *Tamarisk/Noxious Weed Eradication Program – Delta County, Tamarisk Coalition Denver Botanic Gardens*
- ❖ *Colorado Salinity/Selenium Task Force – Colorado Water Conservation Board, Bureau of Reclamation, USGS*
- ❖ *Colorado State Parks Trails & OHV Management Program*
- ❖ *Colorado Natural Heritage Program*
- ❖ *Colorado Division of Wildlife (CDOW) Whirling Disease Reduction Program*
- ❖ *CDOW Habitat Partnership Program*
- ❖ *Crawford Sage Grouse Conservation Plan*



In accordance with NCA legislation, the RMP formalizes agreements for joint management with the following partners:

- Colorado Division of Wildlife
 - Gunnison Forks Habitat Mgt. Plan
 - Habitat Partnership Program
 - MOU for Big Horn Sheep Mgt.
 - Gold Medal Fisheries Mgt.

- Crawford Area Sage Grouse Partnership

& Conservation Plan

- **Incorporation of Science, Best Management Practices (BMP) and Adaptive Management.**

The RMP also addresses the NCA’s legislation mandate to foster and incorporate scientific research in developing and implementing Best Management Practices for resource management, protection, rehabilitation, and use.

The RMP provides mechanisms for BLM to make “adaptive management” changes in areas where new science findings identify a need to modify existing practices to better meet landscape health and other resource objectives. The primary adaptive management projects, under-taken with a variety of partners, are shown in the table below.

- **Gunnison Gorge NCA RMP Implementation Strategy**

In 2004 the Gunnison Gorge NCA was one of the pilot sites that helped develop the current NCA Implementation Strategy. This year, we updated our accomplishments and out-year projects in the Strategy. Overall, we have implemented approximately 70 percent of the priority management actions in the Strategy.

Section 2

1. Physical Condition of Cultural and Natural Resources

Gunnison Gorge Land Health Assessment

The 2001 Gunnison Gorge land health assessment evaluated nearly 110,000 acres of public lands in the Gunnison Gorge Landscape Health Area, which included the entire NCA (62,844 acres) and approximately 47,100 acres of public lands adjacent to the NCA.

The evaluation resulted in a determination of the acreage meeting the Rangeland Health Standards, acreage not meeting, and the nature and location of the problems on the landscape. The table provides a summary of acres meeting or not meeting specific standards.

Standard	Meeting	Meeting With Problem Areas	Not Meeting	Not Known
Standard 1- Soils (acres)	77,861	23,181	48	8,098
Standard 2- Riparian (miles)	14.8	24.7	0	0.3
Standard 3- Healthy Communities (acres)	47,348	48,734	5,008	8,098
Standard 4- T&E Species (acres)	84,692	26,433	0	0
Standard 5- Water Quality (miles)	74.7	5.0	4.4	0



Land Health Concerns

Standard 1 - Soils: Nearly all of the area was meeting this standard. Surrogate indicators of soil erosion, low plant basal cover and high levels of bare ground were the common reason for defining areas meeting the soil standard with problems. Erosionally active gullies occur in some isolated areas.

Standard 2 – Riparian Areas: Riparian areas along about one-third of the perennial and intermittent streams meet this standard with no significant hydrologic or vegetation problems. The majority of areas were rated as functioning at risk—meeting Standard 2 with some problems. Most problems are minor, and relate to vegetation community changes and minor channel changes resulting mainly from flow alteration from dams or irrigation return flow. The Upper Gunnison River makes up the majority of riparian miles functioning at risk.

Standard 3 - Vegetation: The majority of the NCA meets this standard, or meets the standard with isolated problems. Problems vary in nature and include: lack of perennial grasses (especially cool season grasses) and forbs, extensive invasions by nonnative species (mainly cheat grass), scattered noxious weed infestations, and localized problems with shrub vigor, vegetation age-class diversity, and landscape mosaic.



Standard 4 - Threatened & Endangered Species (T&E): The majority of the NCA meets this standard. Problems include: late seral stage conditions, lack of perennial forbs, and poor shrub vigor in the Gunnison Sage Grouse ACEC. Mancos Shale areas pose concerns with effects of recreation use and grazing on sensitive communities. Habitat fragmentation of kit fox habitat and stream flow alteration problems are beyond the scope of BLM's management authority.



Standard 5 – Water Quality: Most NCA streams and rivers meet this standard. Problems include: poor Peach Valley drainage resulting from

unstable channel and poor watershed conditions, and high temperatures, dissolved solids and lack of aquatic life in the Smith Fork tributary of the Gunnison River.

Natural Resource & Heritage Condition Trend

Visual assessments of upland vegetation trend tend to support the observation that upland vegetation is not clearly improving or declining across the NCA. Native perennial shrubs, grasses and forbs continue to be scarce in many of the valley bottoms in the Mancos Shale areas on the west side of the NCA. Shrub vigor is low in some areas, a combination of past drought and heavy browsing—primarily by domestic sheep. These problems have been present for the past few decades and have diminished in some areas, while increasing in others.

Vegetation on the east side of the NCA continues to be in better condition, with natives comprising the vast majority of species. The Mancos Shale area has high potential to support biological soil crusts, but these remain minimal in the disturbed valley bottoms, likely contributing to the absence of natural recovery.

Weeds continue to be a problem in the NCA; not only noxious weeds in isolated areas, but large areas are also infested with cheat grass and other annual, nonnative species.



Riparian area condition appears to be stable with some areas improving as a result of camping regulations limiting impacts and removal of tamarisk along much of the Upper Gunnison River. Much of the current condition is due to the river flow regime that supports a thick growth of the naturalized canary reed grass along the riverbanks. This winter, 900 cottonwood poles and 2,500 sandbar willow cuttings will be planted along the Upper and Lower Gunnison River to begin restoration of the riparian community.

Baseline Data Collection

Establishing new NCA monitoring sites is ongoing as part of the Land Health Standards implementation. Studies capture an array of information to address broader soils, vegetation, wildlife habitat and ecological concerns. The studies have only been read once, so do not yet provide an indication of natural resource trends.



Water quality monitoring sites have been established on the Gunnison River main stem and major tributaries. Chemical, physical, and biological water quality parameters, including aquatic macro-invertebrates, are assessed. The highest quality waters in the NCA include the Gunnison River from the NPS boundary to the North Fork of the Gunnison River confluence.

Additional riparian monitoring sites have been established to track changes in the riverbank and plant community. Sites have been read only once.



Campsite monitoring transects were established and reread twice to track impacts to soil and vegetation. The data helps determine campsite and visitor use and regulatory needs.

USGS established numerous vegetation and cryptogam survey plots in Mancos Shale areas and the Native Plant ACEC. Plot data improves our understanding of the communities, effects of surface disturbance to vegetation, and links between plant and cryptogam communities.

BLM's National Operations Center-Division of Resource Services (NOC-DRS), formerly the National Science & Technology Center, and the NCA are piloting a close-range photography monitoring technique to assess hill-slope erosion processes and effects of surface disturbance. Detailed profiles depict where erosion has occurred at specific sites. The process may have future application as a large-scale monitoring tool for high-erosion areas.

Monitoring results are used to determine where adaptive management actions are needed and to develop Best Management Practices (BMP) for the NCA's diverse landscapes. Mancos Shale data also provides guidelines for managing surface disturbing activities to reduce soil erosion and yields of sediment, salinity and selenium to the Colorado River System.

2007 WORK ACCOMPLISHMENTS

In 2007, NCA and UFO specialists, recreation and biological seasonal employees, partners, and volunteers were involved in numerous projects, planning efforts, and other actions undertaken to: meet NCA legislative mandates; comply with Bureau strategies and policies; and implement Land Health Standards and RMP decisions and management objectives for public land use, resource protection and visitor services.

This year's wildlife, vegetation, and riparian improvement projects included: endangered and sensitive plant species monitoring; macro invertebrate and fish surveys; range allotment inspections and implementation of grazing utilization limits to protect sage grouse nesting habitat; extensive invasive plant and noxious weed inventories; mechanical (hydro-axe), chemical, and biological weed treatments, including the release of thistle bugs in the Gunnison River corridor (*photo*); seeding of previously treated tamarisk areas; and preparations for extensive cottonwood and willow plantings along the Lower Gunnison River this fall and next spring.



Other 2007 NCA work included: USGS Mancos Shale, travel management and wildlife research; archeological surveys and cultural site testing; trail, road and facility maintenance; river ranger Wilderness patrols and permit compliance

checks; campsite inventories, cleanup and rehabilitation projects; coordination with CDOW on new fishing regulations



and extension of the NCA's Gold Medal Fishery; increased visitor contacts, user education, and outreach projects; construction of new trailheads and river access sites; updated information kiosks, maps, and brochures; coordination with tourism partners on brochures and cultural heritage projects; OHV training site construction; and stewardship training for OHV riders.

Our primary 2007 accomplishments are highlighted in the following table.

GUNNISON GORGE NCA - CO154				
FY 2007 Landscape Health Improvement Projects				
PROJECT	PROGRAM	PE's	WORK COMPLETED	COMMENTS
<i>Invasive Plant and Noxious Weed Inventories</i>				
Riparian Areas	1040	BS	50 acres	State Dept of Corrections Program
General Weed Inventory	1770	BS	100,000 acres	NCA-wide inventory
Wilderness campsites	1210	BS	5 acres	BLM ecologist & river rangers
<i>Invasive Plant and Noxious Weed Treatment</i>				
General Weed treatments (herbicide)	1020/1770	JD	50 acres	Black Ridge & C-77 Rds. Uplands & Peach Valley Russian knapweed
River corridor thistle, knapweed, oxeye daisy, yellow toadflax white top treatments+ release of thistle bugs	1220 1770	JD	65 acres	River Rangers, Biological staff & weed seasonals
Gunnison River SRMA tamarisk & knapweed	1020 1020	JD	11 acres	Delta County Weeds and BLM Partnership
Yellow toadflax – hand pulling	1040	JD	3 acres	State Dept of Corrections Program
Peach Valley Uplands, halogeton & knapweed	1020	JD	20 acres	Delta County Weeds and BLM Partnership
Wilderness tamarisk retreatments	1210	JD	125 acres	River Rangers & Tammy Whacker volunteers
Gunnison Forks, trail-heads, knapweed control	1220	JD	5 acres	BLM maintenance
Tamarisk new & re-treatments	1770	JD	130 acres	Delta County Weeds and BLM Partnership
<i>Weed Treatment Evaluations</i>				
Tamarisk removal sites	1770	MK	30 acres	UFO biological staff
Yellow toadflax – Gorge	1040	MK	8 acres	UFO biological staff
Wilderness campsites – Stone Fly overflow sites	1210	MK	17 acres	UFO biological & river rangers
<i>Landscape Health Monitoring & Recovery Projects</i>				
Livestock utilization in sage-grouse habitat	1020	MK	1 allotment	Green Mountain; UFO ecologist
Candy Lance Fence Project; Chukar Road Fence repair	1232	JB	2 projects; 2 miles	Delta Funded by Gorge user fees; State Dept of Corrections Program

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FY 2007 Landscape Health Improvement Projects

PROJECT	PROGRAM	PE's	WORK COMPLETED	COMMENTS
<i>Wildlife Habitat Landscape Health Monitoring</i>				
Kit fox monitoring	1110	MR	5,000 acres	Population status/track boxes; UFO ecologist
Prairie Dog Monitoring	1110	MR	10,000 acres	Historic dog towns
<i>Riparian & Fisheries Protection, Improvements & Monitoring</i>				
Gunnison River SRMA Riparian Restoration	1120	JH	1 project	Seeding in tamarisk treatment areas
Riparian Restoration – erosion control	1770	JH	2 projects	Ramp & culvert projects; bank stabilization; protect water quality
Riparian Restoration – cottonwood fencing	1770	JG	4 projects	Protect trees from herbivory
Gunnison River SRMA–recreation sites	1220, 1120	JI	3 projects	Orchard, Forks & Chukar river access & campsites
Whirling Disease – Hoffer cross fry sampling	1220	MD, MR	10 miles	CDOW partnership
Gold Medal Fishery annual survey	1220	MO, MR	4 day study; 7 river miles	CDOW partnership
Extension of Gold Medal Fishery & change of regulations	1040	MO, MR	7 mile extension below Gunnison Forks	CDOW partnership
Gorge corridor cleanup & campsite rehabilitation	1040	JG	3 projects	River Rangers
Joint fishing compliance patrols with CDOW	1210, 1630	NU, NX	3 river patrols	River Rangers & CDOW
<i>Sensitive Species Protection & Recovery Projects</i>				
Consultation/Mitigation for buckwheat	1150	JP	1 project	Clay-loving Buckwheat Hwy 92 ROW
Gunnison sage grouse guzzlers & catchments	1150	JC	2 projects	Crawford guzzler maintenance
Gunnison Sage grouse habitat monitoring for livestock permit renewal	1150	MQ	13,750 acres	Green Mt., Gould Reservoir, Iron Canyon, Poison Springs, Black Ridge
Sensitive Species Population Monitoring	1150	MR	2 populations	Crawford Sage grouse, Fairview Clay-loving wild buckwheat

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FY 2007 Landscape Health Improvement Projects

PROJECT	PROGRAM	PE's	WORK COMPLETED	COMMENTS
<i>Rangeland Management</i>				
Grazing authorizations issued/transferred	1020	EF, ED	20 permits; 1 transfer	UFO Range Staff
Allotment inspections LHA conformance.	1020	NA	6 allotments	Black Ridge, Poison Spring, Gould Res, Alkali Flats-PV, Brush Pt. Sulphur Gulch, Tri-State, Green Mountain
<i>Hydrologic Monitoring</i>				
USGS Mancos project water & soils monitoring	1040	BP, MU, MI	4 projects, 80 acres	Rain gages, sediment, photo plots
USBS Mancos project – data collection & analysis	1010	BP	16,000 acres	High resolution color IR, Blitz and core samples, efflorescent inventory,
Water quality monitoring of Gunnison main stem and major tributaries	1010	MU	water quality monitoring: and aquatic invertebrates	Meets Colorado Water Quality Designations, Classifications and Standards
Monthly Climate Monitoring and Forecasting	1010	MI	1 station; 12 Climate Summaries	UFO staff
USGS Publication on Chemical Analysis of NCA Mancos Shale Soils	1010	BO	252 samples; 85 sites	USGS Mancos Shale Landscapes Project
Close Range Photographic Monitoring	1010	MA	3 sites – Mancos Shale badlands	NOC-DRS technique to assess hill slope study
<i>Lands & Mineral Management</i>				
Rights-of-way inspected to protect sensitive areas & reduce resource impacts.	1430, 1492	NH	7 inspections	All in compliance
Acquisitions & conservation easement projects	3130	HN	2 projects	Ongoing landowner negotiations; partner with The Colorado Conservation Fund
Selig Exchange	1430	FO, FM	1 project	Exchange being processed
NPS Wilderness boundary survey	1420	BK	1 project	River Rangers, NPS, and surveyor
Film permits	1430	EQ	2 permits	Commercial filming permit
Green Mt. Communication Site Management Plan	1492	DB	1 plan	Completed
ROWs processed	1430	FP	7 cases	UFO Lands staff

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FY 2007 Landscape Health Improvement Projects

PROJECT	PROGRAM	PE's	WORK COMPLETED	COMMENTS
<i>Cultural Site Protection</i>				
Fencing of Gunnison Rock Art site (5DT 813)	1050	HF	1 project	Site protection plan
Lawhead Gulch Trail	1050	BC	5 acres	Inventory/EA of proposed trail & fence location
Monitor Cultural Site 5DT 813	1050	MY	1 acre	Installed monitoring point and collected baseline data/photos.
Test excavation of Cultural Site SDT 813	1050	FD	1 site	Western Wyoming College field archaeology program
<i>Wilderness Protection, Monitoring & Permit Administration</i>				
Wilderness Monitoring	1210	MD	17,700 acres	Foot, boat, vehicle, aerial monitoring
Wilderness patrols & campsite cleanups	1210, 1220	MD, NX	27 river patrols	Seasonal River Rangers
Trailhead & trail patrols	1210, 1220	MD, NX	72 patrols	River Rangers, law enforcement officers (LEO), visitor services,
Route Assessments of river corridor fishing access trails	1210, 1220, 1770	BY, MV	12 miles	NCA staff, UFO Recreation Planner,
Wilderness visitor contacts	1210, 1220	BA, NX	4,175 contacts	River Rangers, LEO, visitor services, staff
Gunnison Gorge non-commercial permit administration, compliance	1232	FH, FV, FU	4,000 permits = 8,300 visitors	River Rangers, LEO, visitor services, staff
Closure of trail to 4WD vehicles to protect soils, scenic values	1220	MV	2.5 miles	Sunset Rocks Trail Chukar Fault Zone Geologic Area
Wilderness campsite analysis -Stone Fly Hatch overflow sites	1210, 1220	MA	5,000 acres	NCA staff & River rangers
Annual Gunnison Gorge Outfitter meeting (CROA)	1210, 1220	EA, NX	10 permittees	NCA staff;
<i>Recreation Management, Operations & Visitor Services</i>				
Maintain recreation facilities, dispersed camps, trailheads to control visitor impacts/ resource damage	1220, 1652	IA, IU	13 developed sites, 30+ dispersed recreation sites	1 maintenance person shared with UFO, seasonals & contracts
Construction of 3 trailheads, 1 river access site	1220, 1652	IA, IU, IW	4 new sites	Eagle Valley, Sunset Rocks, West River Trail, Orchard Boat Ramp

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FY 2007 Landscape Health Improvement Projects

PROJECT	PROGRAM	PE's	WORK COMPLETED	COMMENTS
<i>Recreation Management, Operations & Visitor Services (continued)</i>				
Upgrade of 4 Wilderness Trailheads	1220, 1652	IA, IU, IW	4 sites	Chukar, Bobcat, Duncan, & Ute Trailheads
Road maintenance; repair of sinkholes & flood damage	1652	IP	40 miles	BLM, Delta & Montrose Counties
Inventory of Gunnison River SRMA river sites	1220	BA	20,000 acres	NCA staff
Evaluate SRMA facility, signs, maintenance needs.	1220	MA	80,000 acres	NCA staff & maintenance
Monitor & sign travel management areas	1770, 1652	MA	3,500 acres	BLM & State Parks partnership
Trail maintenance to control erosion, replace signs, etc.	1770, 1652	ID	80 miles	OHV crew
OHV visitor contacts & compliance checks	1770	BA	5,500 acres; 3,900 contacts	OHV crew, LEO, NCA staff
Annual trail monitoring	1770	MV	250 miles	OHV crew
<i>Major Public Outreach & Environmental Education Projects</i>				
Gunnison Sage Grouse study & outreach partners	1150	AL	1 project	Work with Audubon Board members; USGS project
USGS Research Results/Brochures	1010	AL	2 projects	GeoCorp intern "Geology of Adobes & Mancos Shale Fact Sheet"
Annual Water Festival – environmental education	1040	AL	1 project	Riparian trailer
Weed Outreach Projects	1020	AL	2 projects	River Rangers & County
NCA Heritage Resource education projects	1050	AE	3 projects	Rock Art brochure, signs, NPLD project
National Public Lands Day - Peach Valley - Peach Valley Fence Project	1220, 1770	AL	5 projects	OHV Crew & volunteers
Nat. Rivers Week - North Fork Awareness Event	1220	AL	1 project	200+ people; River Rangers
National Trails Day - Chukar Trail Work Project	1232	AL	2 projects	River Rangers & GJ Boy Scouts
Earth Day Public Lands Awareness & Cleanup	1220	AL	100 acres	NCA staff & Cocker Kids Foundation; Kids-at-risk
River Ranger education & river cleanup trips.	1210, 1220	AL	14 trips	Delta County, school districts, tourism groups

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FY 2007 Landscape Health Improvement Projects

PROJECT	PROGRAM	PE's	WORK COMPLETED	COMMENTS
<i>Major Public Outreach & Environmental Education Projects (continued)</i>				
National Trails Day - Western Slope 4-Wheelers Adopt-a-Trail project	1770	AI	7 miles of trail adopted	OHV crew & Western Slope 4 Wheelers Club (38 volunteers)
River Ranger education & river cleanup trips.	1210, 1220	AL	14 trips	Delta County, school districts, tourism groups
Nat'l Fish/Boating Week NCA Awareness Float - campsite rehabilitation	1220	AL	7 miles river corridor	River Rangers & Chaco Sandals volunteers
Nat'l Fish/Boating Week; - TU float, West River Trail cleanup; Fly Fishing Expo	1220	AL	2 events	NCA Recreation Planner, CDOW and TU volunteers
Gorge Float with State Director, Colorado Dept. of Natural Resources & NPS to discuss NPS water rights	1220, 1010	AL	1 trip	Sally Wisely, Harris Sheman, NCA/UFO managers, UFO & NPS
Montrose-Delta Hospitality Training - NCA awareness & public outreach	1220	AL	2 presentations	NCA manager & UFO Rec Planner; Delta & Montrose City & Counties VCBs, Tourism Boards
Delta County Tourism Cabinet -NCA awareness & public outreach	1220	AL	8 meetings; 2 field trips; new tourism brochure	Delta County, City of Delta, Crawford, Delta, Paonia Chambers
Gunnison River Alliance Friends Group Cleanup	1220	AL	1 project	River Rangers & Volunteers
Gunnison Tammy Whacker enviro. educ. projects	1232	AL	6 projects	River Rangers & Volunteers
Chukar Toilet painting, register & signs	1232	AL	2 projects	River Rangers & Volunteers
Gunnison River SRMA campsite projects	1220	AL	2 projects	River Rangers & Volunteers
Fishing regs - signs, public outreach, visitor contacts	1220	AL	2 projects	River Rangers & DOW Partnership
Colorado River Outfitter Association meeting; Aspinall Op. meetings	1210, 1040	AL	5 meetings & presentations	NCA Mgr, River Rangers & UFO Hydrologist
Cross-training front desk & backcountry visitor service seasonals & rangers	1210, 1220	AL	2 trainings	River Rangers, NPS, USFS interpretive specialists, rangers, & volunteers
Benefits Based Mgt. float w/Delta Co. tourism groups	1220	AL	1 event	River Rangers, NCA Mgr. & tourism groups
NCA Living Classroom education projects	1220, 1770	AL	2 projects	Olathe schools, USGS & GeoCorp Intern

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FY 2007 Landscape Health Improvement Projects

PROJECT	PROGRAM	PE's	WORK COMPLETED	COMMENTS
<i>Major Public Outreach & Environmental Education Projects (continued)</i>				
BLM/NPS Visitor Guide, maps & articles; Montrose Style NCA articles	1210, 1220, 1232	AL	3 projects	NCA manager
New OHV brochure, trailhead signs, maps	1770, 1220	AL	13 projects	OHV crew, NCA & UFO staff & volunteers
Motorcycle & ATV certification & user ethics training	1770	AL	95 students; 15 classes	OHV crew
Trash dumping news release	1220	AL	1 media release	Public Affairs & NCA manager
Other NLCS outreach: Natural Areas Program Escalante article; D-E NCA Meetings & field trips	1220	AL	7 events	Public Lands Partnership, SWRAC, Partners, Gateway Youth Group
<i>Law Enforcement Patrols, Enforcement & Investigations</i>				
Recreation/Wilderness, OHV areas, trailheads, North Fork. SRMA, jeep trails, cultural sites, etc.	1220, 1232	NU	22 patrols	Monitor recreation sites, sign & facilities, permit & Wilderness compliance, OHV vehicle checks, visitor contacts & educ.
Other patrols (Lands, hazmat, wildland fire etc.)	1430, 1630, 1640, 2810	NU	12 patrols	Monitor ACECs, boundary patrols
Recreation - Wilderness, OHV areas, trailheads	1220, 1232	NV	16 investigations	Vandalism, theft of fees, SRP, OHV, travel management violations
Other Investigations	1630	NV	4 investigations	Trespass, game violations, trash dumping, littering, fireworks.
Emergency Responses	1220	NY	1 incident	Boater/hiker rescues
Drug Enforcement	1630	OA	2 incidents	Possession charges, fines, etc.



2. Condition of Recreation Facilities, Roads and Trails

FACILITIES

NCA facilities are maintained by permanent and seasonal staffs. The NCA shares one permanent maintenance position with the UFO. Annual maintenance includes painting, repair of tables, roofs, sign kiosks, fences, graveling of parking areas, floor and wall resurfacing, vault pumping, large-scale weed treatments, etc. Contracts are used to fund additional labor needed for some projects.

In addition to annual maintenance, many areas require weekly and sometimes daily maintenance to keep them in acceptable condition for public use. Vandalism to signs, restrooms, fences, etc. is a chronic problem. NCA operations and maintenance funds are not adequate to cover work needed to repair vandalized sites, address health and safety concerns, and keep facilities in good working condition that meet visitor expectations for high quality recreation sites.

11 toilets (8 vaults, 3 pit toilets) These facilities require a *minimum* of weekly cleaning year-round. During the summer river season and OHV high-use periods (spring/fall), the toilets require daily cleaning. Vault pumping for six front-country toilets averages \$ **3,000/yr.** Cleaning of two backcountry toilets requires packing out barrels of waste by horses and costs \$**4,000/yr.**

1 large-capacity (3,600 gallons) sanitation dump station requires maintenance throughout the season due to high use and recurring pump problems. Costs to pump the unit average \$**2,500/yr.** Costs for toilet and dump station pumping are steadily rising due to increased gas and mileage surcharges.



4 Major Wilderness Trailheads

(restrooms, picnic tables, cabanas, sign kiosks, fee boxes, registers, fences, graveled parking area with barricades) – Sites require 2-3 treatments per year to control weeds. The trailheads were upgraded this year to enhance visitor services, meet fee collection and ADA requirements, and provide consistency in design for all NCA sites.

4 NCA Entrance Sites (fencing, signs, graveled parking areas) - These sites with large portal signs are constant vandalism targets. In 2006, all painted wooden portal signs were replaced with ½-inch steel signs and decals to reduce vandalism and theft. This year, rock bases were added to three of the portals.

Flat Top OHV Area

(large parking area, signs, and restroom) – This site is one of our heaviest used year-round areas and requires weekly

maintenance and

LEO attention to deal with the aftermath of busy weekends, underage drinking and drug parties, bonfires, and recurring vandalism.



Falcon Road OHV Staging and Training Area (extensive fencing, sign kiosks, graveled parking areas with barricades, picnic tables, cabanas, 2 loading ramps, 2 toilets). This facility receives heavy use and vandalism, and needs year-round maintenance and monitoring.

Gunnison Forks Watchable Wildlife Area & Day Use Recreation Site (picnic tables, cabanas, sign kiosks, graveled parking with barricades, boat launch, 2 restrooms, sanitation dump station) - This very popular area receives year-round use and impacts from illegal camping and OHV use, and vandalism. Weed control and mowing is extensive, requiring 4-5 treatments annually to control re-invasion of weeds from surrounding private lands.

Other High-Maintenance Areas -

The NCA has over 60 dispersed campsites, trailheads, overlooks, and other high-use areas which require regular monitoring and maintenance.

Adobe badland areas provide numerous remote sites for illegal partying and trash dumping. Dumpsites include truckloads of household trash and appliances; construction waste; mountains of tires; hazardous materials (oil, antifreeze, paint, herbicides); and animal carcasses.

The NCA averages 1-2 large trash dump sites a week that require immediate LEO investigation and maintenance attention due to public health and safety concerns.

Another huge maintenance problem is caused by target shooters who leave behind acres of land and hillsides littered with shattered glass bottles, twisted beer cans, broken clay pigeons, spent shells, and the remains of larger targets such as TVs, computers, furniture, and appliances. We are currently implementing RMP decisions that close the NCA to target shooting, but many users choose to ignore the new regulations.

ROADS & TRAILS

NCA routes are a mixture of dirt and gravel county roads; high clearance and four-wheel drive BLM roads; primitive ATV and single-track motorcycle trails; and very steep and rocky hiking trails. These diverse routes require varying levels of maintenance to meet management objectives for different types of recreational activities and experiences, permittee access, and BLM administration needs.



Some routes receive annual maintenance while others are maintained only when damaged by floods or careless use. This year's spring runoff and summer monsoons severely damaged access roads and trails, stranded visitors, and knocked out trail bridges in the OHV area, requiring immediate attention by BLM, Montrose and Delta Counties.

Fifteen miles of Wilderness access roads were upgraded this year to fix chronic safety problems. A 5-mile BLM access road in the northern NCA was upgraded with turnouts and water bars to allow for improved and safer vehicle access. Dangerous, large sinkholes along the Peach Valley and Chukar Roads were repaired.

We also signed an agreement with Delta County for that county to take over regular maintenance of an additional 15 miles of NCA roads. This agreement will help stretch our annual maintenance dollars further while providing improved public access.



The NCA's adobe badland areas consist of wide open, barren or sparsely vegetated hill slopes easily

accessible to OHV users due to close proximity to county roads and expanding housing developments.

Illegal trails are very visible and difficult to eradicate given the nature of Mancos soils; lack of vegetative cover; and lack of trees, rocks, or other topographic features that can be used as natural barricades. In addition to OHV tracks, the adobes are also crisscrossed with miles of sheep trails. Sheep routes are often mistaken and illegally used as OHV routes. Signs, barricades, and fences are used to address these problems but they continue to occur.

The OHV crew monitored and maintained over 75 miles of popular motorcycle, ATV, and mountain bike routes this year to repair water bars and arroyo crossings after rain events and remove evidence of switchback cutting, rutting, and illegal off-route use.



NCA SIGNS

The majority of large wooden directional, information and regulatory signs have been replaced with ½-inch plate steel signs with decals to reduce theft and vandalism. Steel signs last longer but still require repairs when vandalized by graffiti, winches, armor-

piercing bullets, AK-47s, and other heavy artillery. Annual costs for steel sign repairs average \$3,000-\$5,000/year, not including LEO time spent investigating vandalism incidents.

The OHV crew monitors and maintains over 400 travel management signs throughout the NCA.

In 2007, over a quarter of the signs were shot, driven over, or stolen. Some signs are replaced two to three times a season. Cost of replacing travel signs is \$50 per sign and averages \$7,000 per year.

Large steel signs notifying NCA visitors of new designated route travel regulations in formerly open areas were installed at three major NCA entrance sites. In addition to the signs, a new fence was installed to delineate the boundary between the Peach Valley open and limited areas.



New NCA maps and trail information signs were developed for the new Eagle Valley, Sunset Rocks, and West River trailheads. Signs at the four Wilderness trailheads were also updated with new Wilderness regulations and maps showing new designated river campsites.

Deferred Maintenance Projects 2007

Chukar Road Upgrades

Two large culverts were installed along the Chukar Road to address significant flooding problems along this heavily used road.

Turnouts were installed and gravel was added in some areas to reduce ruts.



The 7-mile Chukar Road is the primary access for the majority of Wilderness users and the only road that provides access for Gorge boaters. Most of the road is on Mancos Shale soil which results in erosion, head-cutting and rutting problems. The road is scheduled for re-gravelling in 2008-2009.

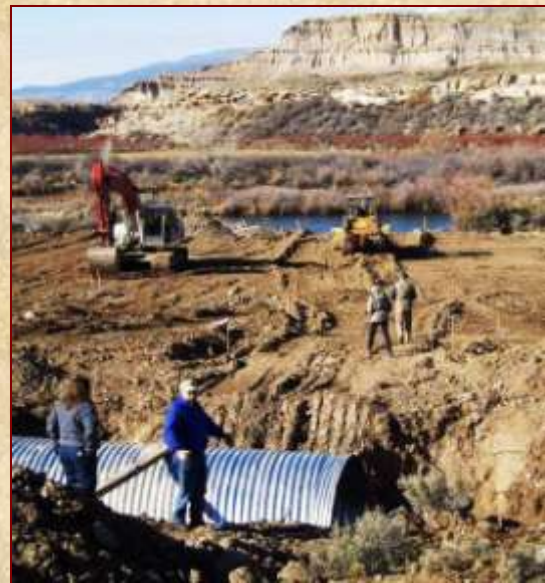
Wilderness Trailhead Upgrades - The four major Wilderness trailheads were upgraded this year to meet ADA requirements and improve visitor information and services at the sites. New fee boxes and registers were installed to comply with BLM and Federal Lands Recreation Act Enhancement Act (FLREA) regulations for fee areas. Stone benches, double kiosks, cabanas and accessible picnic tables were installed at all sites.

An existing campsite at the Chukar Trailhead was upgraded to a universally accessible site with new parking and tent areas. The horse packing station was moved and re-designed to increase visitor and horse safety. A rock wall was added to separate the trailhead from the very busy access road. These additions have increased visitor safety and reduced traffic, horse, and people congestion at the NCA's most heavily used trailhead.



New Construction Projects Completed in FY2007

Orchard River Access Site - A new river access site was constructed along the lower Gunnison River in the north NCA. The site provides a safe, easily accessible public access for boating and fishing along this popular stretch of river and will greatly reduce trespass problems on private lands in the area.



Site development, which included a culvert on a major irrigation canal, large parking area, and new graveled boat ramp required ongoing communication with CDOW, BOR, FWS, local ditch companies, landowners, and user groups. Other facilities include a sign kiosk, register box, and barricades.



Eagle Valley, Sunset Rocks, and West River Trailheads – Three new trailhead facilities were constructed for Eagle Valley, Sunset Rocks, and the West River Trails. Construction included: informational kiosks, graveled access roads and parking lots, register boxes, and rock barricades.

Peach Valley Recreation Area OHV Training Site and Beginner's Loop Construction - The OHV crew received a \$12,000-OHV grant from the State Trails Program to build a training site and beginner's loop at the Peach Valley Recreation Site. Additional funding for the two projects was provided by BLM's Challenge Cost Share Program.



A training hill and rock and log pad containing obstacles similar to those found on many of the NCA's trails were installed in the training area to challenge riders of all experience levels.

The beginner's loop contains practice hills and banking turns, and a sand pit where new riders can refine their basic ATV and motorcycle handling skills.



3. Environmental Education and Resource Interpretation

NCA visitation is approximately 90,000 visitors/year.

The majority of visitor contacts are made in the field by BLM law enforcement personnel, non-LEO seasonal river rangers (four positions in 2007 shared with UFO), one seasonal visitor services person, and one maintenance personnel (shared with UFO).

About 20 percent of visitors come into the Montrose Public Lands Center where front desk personnel and volunteers working jointly for BLM, USFS, and NPS assist them.

The NCA manager, NCA recreation planner, UFO recreation planner and seasonal staff spend many hours talking to visitors on the phone and answering email and letter inquiries for information and brochures.

The majority of contacts involve questions about Gunnison Gorge Wilderness boating and fishing, camping regulations, and OHV recreation areas and trails.

Our NCA website (<http://www.blm.gov/co/st/en/fo/ggnca.html>) contains user information, regulations, maps, photos, commercial outfitter lists, and BLM contacts.

NCA information brochures include:

- **2007 Flat Top-Peach Valley Recreation Area Brochure** - includes map and trail descriptions for the 10,000-acre SRMA.



- **2007 BLM & NPS Visitor Guide** - updated 2007 guide contains new NCA maps and science article and visitor information for the Black Canyon National Park, Curecanti National Recreation Area, and the Gunnison Gorge NCA.
- **2007 Delta County "Our Side of the Divide" Brochure** - tourism guide updated to include new public lands section with NCA, NPS, and USFS maps and information.
- **Gunnison Gorge Visitor Guide** - needs to be revised to include new BLM, NPS and CDOW regulations. Update scheduled for 2008.
- **Gunnison Gorge Day Use and Camping Fees Information** - needs to be updated with FLREA information.

Additional printed materials available to the public:

- **USGS Geological Map, Geologic Story, and Geology Brochure of the NCA** - wall-sized poster, 40 page booklet, and brochure.
- **BLM - Adobe Badlands Brochure** - BLM information about Mancos Shale soils, plant and animal communities, and how visitors can help protect them.
- **Geology of Adobes Guide & Mancos Shale Fact Sheet** - 2007 USGS/BLM GeoCorp Internship NCA Living Classrooms Project.

NCA Interpretive & Cultural Programs

We do not have a formal interpretive program for the NCA. The NCA RMP has numerous management actions in it calling for enhanced user education and interpretation. Our NCA table of organization includes an environmental education and interpretation position; however, base budget funding is not adequate to fund this position at this time.

Our past BPS and NLCS data call submissions requesting flex funding for an interpretive plan and program have not been funded. A FY09 NLCS budget request was submitted this year requesting funding for the much-needed environmental education/interpretation position.

In the absence of an interpretive plan and reliably funded program, the NCA and UFO staffs respond the best they can to requests from visitors, schools and user groups for field trips, interpretation materials, environmental education programs, etc.

Only about 20 percent of the NCA's cultural resources have been inventoried.

Cultural program funding for the NCA currently covers only two work months of the UFO archeologist's time for NCA work.

In addition to working on a backlog of NCA cultural inventories and site protection projects, the UFO archeologist is also working with Western Wyoming College to develop a "Project Archeology" program for the NCA.



Main Messages

Our main message is that the NCA lands are special and therefore demand special care. Visitors are coming in ever increasing numbers, and while vandalism, illegal dumping, poaching, and underage drug and alcohol use are never okay anywhere on public lands, neither these activities or target shooting are allowed in the Gunnison Gorge NCA. Conserving these special public lands is paramount, as is protecting public safety.

Updated trailhead signs installed this year focus on new NCA user regulations including: group size limits; day use and camping regulations; permit requirements; travel management; and stewardship ethics.

Other ways in which we get our message out include: increased visitor contacts; working with schools and friends groups; involving user and interest groups in field trips and cooperative conservation projects; and emphasizing stewardship in OHV training classes.



Environmental Education

OHV Education Program

As part of the NCA education program, our OHV crew is trained as certified motorcycle and ATV instructors. Providing OHV training to the public is not common in BLM, and we are proud to showcase a successful example of how effective training programs can be in exposing OHV users of all ages to NCA management and stewardship principals while teaching them safe and responsible riding skills.

The OHV training program emphasizes user ethics and environmental protection programs including “Stay the Trail,” “Right Rider,” and “Leave No Trace.” Since 2004, over 220 students



(K-12) have participated in this successful education program.

Two crew members are middle and high school instructors and work on campus with other

teachers on environmental education efforts in science, history, and physical education courses.

The teachers also work with over 100 students in local middle and high school dirt bike clubs to foster responsible riding on public lands. The Montrose High School Dirt Bike Club regularly assists the crew with projects, trail maintenance, and networking with other users to spread the word about changes in NCA OHV regulations and why those regulations are needed.

Olathe Schools Community Stewardship Day

For five years, we have partnered with Olathe teachers and students on their annual **Community Stewardship Day**. This year, the group conducted an extensive clean-up of a popular target shooting and trash-dumping area, and then participated in an interpretive hike with the NCA manager through the Eagle Valley Living Classroom site where they learned about the Area’s history, geology, wildlife and plant communities, and biological crusts.

Cocker Kids Foundation

Rock legend, Joe Cocker and his wife, Pam, are NCA neighbors and active supporters of public lands. Their Cocker Kids Foundation targets local kids-at-risk and involves them in community efforts and stewardship projects.

This year, we partnered with the Foundation on an Earth Day project to clean up a major trash dumping area adjacent to the NCA’s east side.

While at the site, the group witnessed people dumping trash and reported the incident to BLM law enforcement. The perpetrators were fined and required to clean up the site.

Articles about the clean-up and trash dumping incident were printed in local papers to increase public awareness of the Foundation and trash dumping problems on public lands.



Partners & Nexus Kids Program

We have worked with Delta and Montrose **Partners & Nexus Programs** for over 12 years. The NCA sponsors annual Gunnison River floats for 25-50 kids. The program provides an outstanding education opportunity for kids-at-risk to learn about and enjoy their public lands while participating in a river clean-up project.

Gunnison Gorge River Ranger Trips

A significant number of environmental educational and outreach projects are done each year by our seasonal river rangers. This year, the rangers conducted 14 raft trips with schools, environmental organizations, boating and angling groups, kids-at-risk programs, local tourism groups, and local and state agencies

The purpose of the trips is to enhance visitor awareness, appreciation and stewardship of the NCA. Participants receive hands-on training in Wilderness management, resource protection projects, and environmental ethics while learning about the NCA’s natural and cultural resources.

Delta County Tourism Cabinet

As a member of the **Delta Tourism Cabinet**, the NCA manager networks with tourism providers to: keep abreast of tourism trends and potential impacts to public lands; provide accurate BLM input, NCA information and stewardship messages for local, regional, and national tourism marketing materials and special events; and coordinate joint funding grants for kids-at-risk programs and community events.



Again this year, members of the Cabinet and Delta County staff participated in a Gorge float with the NCA manager to discuss tourism issues and learn firsthand how we are implementing Benefits-Based Management throughout the NCA.

The group also worked on updating the County's 2007 tourism guide to include a public lands section with NCA, NPS, and USFS maps and information.

The Delta and Montrose County tourism groups joined forces this year to host a full-day Hospitality Training Workshop for "front desk" volunteers and staff from city and state welcome centers, chambers of commerce and public land agencies. The NCA manager and UFO recreation planner gave presentations about the Gunnison Gorge NCA and other BLM lands in the area.

Geological Society of America

This year, we again partnered with the Geological Society of America (GSA) to jointly sponsor a GeoCorps intern for the NCA. The intern worked

with our science partner, USGS, to develop user-friendly science information for the NCA's Eagle Valley Living Classroom site.

GSA's contributions included candidate recruitment and administration. BLM's share of the project was funded by the national NLCS office and the Gunnison Gorge NCA. USGS provided training, supervision, office space, a vehicle, and printing of the materials.

In addition to extending the NCA and USGS research capabilities, the GeoCorps program provided the intern valuable on-the-job training and work experience.

Western Wyoming College

The UFO archeologist, archeology professors and students from Western Wyoming

College are conducting test excavations on prehistoric deposits and archeologist remains at the NCA's Gunnison River Rock Art Shelter site.



Samples collected at the site will be analyzed and prepared for curation at the College. The ongoing research, archeological findings, and the shelter site will be interpreted and used as an outdoor classroom as part of the NCA's Project Archeology and Living Classrooms programs.

In 2006, the rock art on the site was documented, evaluated and a site management plan was prepared. A brochure is being developed for the site. Future plans call for interpretative signs, trailhead facility, and Living Classroom curriculum to be developed for the site.

4. Status of NCA Science Program

USGS-BLM Mancos Shale Landscapes Project

The NCA's adobe badlands have been the primary research sites for the [USGS Mancos Shale Landscapes Project](#), a multi-disciplinary project covering the Upper Colorado River Basin and involving the USFWS, Bureau of Reclamation, Gunnison Basin Selenium Task Force, Colorado River Basin Salinity Control Forum and Grand Valley Selenium Task Force.

Over the past 5 years, the Mancos Landscapes Project has involved studies in regional geochemistry; geologic and soil mapping, digital elevation and GIS modeling; soil and rock mineralogy; remote sensing; landscape classification; erosion processes; and inventories of Mancos vegetation communities.

2007 USGS Project Work



The majority of field data gathering and sample collections was done from 2003-2006. Additional research and data gathering occurred in FY07, but most work focused on data consolidation, analysis, and preparation for interpretation.

Highlights of FY07 USGS Activities

1. Efflorescent salts collected from sites in and adjacent to the NCA were tested for selenium content. The salts are ephemeral and most abundant in spring or shortly after soaking rains.



Highest selenium contents (150 ppm), occurred in an area outside the NCA typically flooded with irrigation water. Highest NCA selenium content was 70 ppm.

2. The USGS, BLM, USFWS and the Colorado Nature Conservancy (TNC) collected soil samples and data on soil characteristics related to a privately owned *Eriogonum pelinophilum* (federally endangered wild clay-loving buckwheat) site adjacent to the NCA.
3. Additional work was conducted on the rock core collected from the Candy Lane drill hole in FY06. Macro-fossils were identified and detailed mineralogical studies were conducted.
4. A Geological Society of America Geocorps intern prepared a layperson's summary of the geology of the adobes along with descriptions of some of the USGS's salinity, selenium, and erosion research.
5. Raw project data is being incorporated into an ArcMap-based project that will be published and shared with BLM.
6. High-resolution IR aerial photography was reflown and prepared for publication along with aerial LIDAR data.

Applications of USGS Research

This year's research provides data on the distribution and concentrations of selenium in Mancos soils under various land uses and seasonal conditions. Analyses of the rock core, efflorescent salts, and other soil samples will help characterize NCA soils, explain differences in land forms, and determine why some badlands areas have elevated salt and/or selenium levels.



Soil characterization may also explain why some species, such as the endangered clay-loving buckwheat, flourish in some areas but not others. This

information may be useful in developing species and habitat protection and recovery plans.

On a broader level, the Mancos Shale Landscapes Project helps BLM managers and the public understand landscape level changes over time as well as the effects of surface-disturbing activities on Mancos areas. It furthers Bureau-wide science and research goals and contributes to technology transfer between USGS, BLM, other agencies and academia.

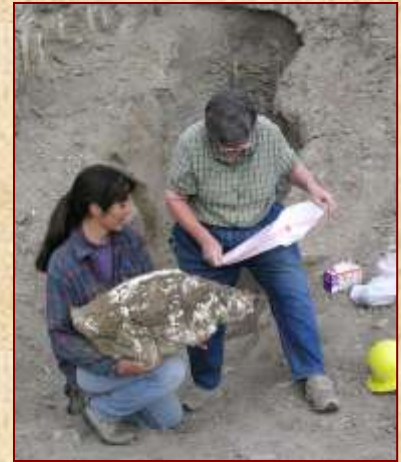
Products derived from the USGS/BLM partnership include: outstanding Landsat and LIDAR imagery; photography, data sets and erosion models for hillslopes and valley floors; soil characteristics, precipitation runoff estimates; geochemical analysis of rock and soil samples; and monitoring protocols.

The project has also yielded outstanding education projects including a geologic map, posters and guides used in NCA Living Classroom sites; interpretive and environmental education materials, and school and college classes.

Project Reports

USGS project reports (rainfall simulations, hill-slope erosion work, "Blitz soil chemistry, etc.) are being published as USGS Open-File Reports and shared with BLM.

A summary of the entire Mancos Shale Landscapes Project in the form of a USGS Fact Sheet is being prepared and is scheduled for completion by the end of 2007.



The excellent USGS website:

<http://minerals.cr.usgs.gov/projects/mancosshale/index.html> provides copious information on this large, multi-agency project including research updates, summaries, maps, Landsat & LIDAR imagery, and scientist contact information

Applications of the Gunnison Gorge NCA Mancos Shale Landscapes Project

- 1. Provides new ways & methods to assess, monitor, manage & protect natural & cultural resources.**
- 2. Provides information & methods for developing BMPs & restoration projects.**
- 3. Provides scientific basis for supporting enhanced NCA management & adaptive management decisions.**
- 4. Provides interagency coordination model & experience base for other areas.**
- 5. Contributes to wider understanding & application of science-based management.**

NOC-DRS Hill-Slope Erosion Processes Study

In 2006, the BLM National Science and Technology Center, which is now the National Operations Center-Division of Resource Services

(NOC-DRS) piloted a project to test the feasibility of using close-range photogrammetry to collect 3-dimensional data to detect and monitor changes in surface soil elevations.



Data analysis indicates that areas of soil loss and/or gain can be quantified by comparing data sets collected over a period of time. Such comparisons would be useful in determining where adaptive management actions are needed to improve resource conditions.

Processing the data, however, is complex and requires continued assistance from NOC-DRS. Although this makes the process somewhat less feasible for the types of monitoring we do on a regular basis, the technology definitely has promise as an accurate, time and cost efficient, large-scale monitoring method for NCA soils.

In August, the USGS tested the use of ground-based LIDAR imagery to measure



disturbed and undisturbed hill slopes to get similar results as the NOC-DRS method. Results of that research are due at the end of this year.

USGS Study on Effects of Roads and Traffic on Wildlife Habitat Use

This multi-agency (USGS, BLM, NPS, USFS, CDOW) cooperative study is using elk GPS transmitters and traffic monitors to understand the effects of traffic on elk migration routes and Gunnison sage grouse habitats in the Gunnison Basin area.

CDOW hypothesizes that elk herds that migrate from summer ranges in the USFS West Elk Mountains to



winter habitat areas on the east sides of the Black Canyon of the Gunnison National Park and Gunnison Gorge NCA find refuge from hunting in the Park, on nearby private lands where they compete with domestic livestock for forage, and in the NCA where they move through, and potentially adversely impact, sensitive sage grouse habitat.

In 2008, the USGS is planning to outfit five Gunnison sage grouse with small backpack transmitters to monitor their movements in the ACEC. The transmitters will first be tested on pheasants that are close to grouse in size, to ensure they will not adversely impact the grouse.

Information on how vehicles influence the timing of elk movements will be helpful to BLM in determining whether NCA seasonal road closures implemented in 2006 to protect sage grouse nesting and lek areas are effective, and where changes might be needed in our sage grouse ACEC management and monitoring plans.



5. Cooperative Conservation

Gunnison Gorge NCA Friends Groups

Gunnison Gorge River Rangers and Tammy Whackers

Since 1999, the **Gunnison Gorge “Tammy Whackers,”** a friends group supported by Wilderness user fees, has assisted BLM river rangers in controlling tamarisk (*aka* “tammies”) in the Gunnison Gorge.

Controlling tamarisk in the Wilderness is extremely labor intensive and expensive as it is done by hand, without the use of motorized equipment. Complete removal requires repeated cutting and spraying treatments over the course of 3-4 years to control re-infestations. Tamarisk control herbicides average \$300 per gallon.



Last October, the river rangers worked with the Montrose Interagency Fire Management Unit to burn dried piles of previously cut tamarisk trees in the lower river corridor. BLM and Delta County coordinated on a plan to seed the treated areas and control invasive species.



In addition to treating tamarisk, volunteers also help the UFO resource staff and NCA river rangers monitor other invasive weeds in the NCA. This year, four new infestations of yellow toadflax and 36 infestations of oxeye daisy were found and treated.

Gunnison River Alliance (GRA)

The mission of the GRA friends group is to: assist the NCA in implementing RMP decisions; host special events such as National Public Lands Day, National Rivers Weeks, etc.; and help with volunteers and outside funding for river-related resource protection projects such as weed control, fishery and riparian enhancements.

This year we again received \$4,000 in funding from the Washington NLCS office to use for capacity building with GRA. The group used 2007 funds to develop an expanded vision statement, charter and a sustainability strategy; print promotional materials; and revise the GRA website to reflect organizational changes.

GRA also assists BLM projects related to the Dominguez WSA, another UFO NLCS unit located downstream of the Gunnison Gorge NCA. This year, group members grubbed out treated tamarisk stabs along a popular WSA trail to make it more visible and safe for other users.

Collaborative efforts with Local, State & Federal Governments & Other Partners



Colorado Department of Natural Resources

In June, the NCA hosted a Wilderness raft trip with BLM State Director Sally Wisely and Harris Sherman, head of the Colorado Department of

Natural Resources to discuss BLM's involvement in the Black Canyon of the Gunnison National Park's water rights negotiation with the State.

The NCA Manager, UFO hydrologist and NPS Resource Lead briefed the group on how BLM's Wilderness and NCA management, and visitor experiences will be affected by changes in water levels under various flow scenarios proposed in the negotiations. BLM's State Water Rights Coordinator attends regular interagency water meetings to present NCA concerns and keep us updated on this critical issue.

Colorado State Parks/OHV Program

BLM has worked with Colorado State Parks for over 15 years on OHV issues and user education projects. Since 2002, BLM has received over \$300,000 in OHV trail grants from the State's OHV registration program to fund a three-person NCA/UFO trail crew. This year, the State awarded the crew "Good Management" status which makes them eligible to receive \$50,000 in trail grants each year.



We successfully leveraged OHV grant dollars to secure another \$50,000 in BLM Challenge Cost Share (CCS) funds for 2007. CCS funding is essential to



cover vehicles, equipment, and contract costs, project supplies, educational materials, and other crew support costs.

OHV Crew Major 2007 Accomplishments

- Conducted 15 motorcycle and ATV training classes for 90+ people at the NCA's Peach Valley Recreation Site.
- Received \$12,000 in grant funding for design and construction of a challenging training course and beginner's loop at the Peach Valley Recreation Area.
- Completed signing of 75+ miles of trails in Flat Top-Peach Valley SRMA.
- Monitored, maintained trail counters and 400+ travel management signs.
- Repair/replaced bridges and river crossings damaged by 2007 floods.
- Developed the new Flat Top-Peach Valley Recreation Area trail map & brochure.
- Provided user education information and made over 4,000 visitor contacts.

Crew members are certified motorcycle and ATV instructors. Since 2004, over 350 students (ages 6-82) have participated in this successful OHV education program which teaches basic riding skills, public land stewardship, and user ethics.

The crew also works with local schools, dirt bike clubs and dealerships to foster responsible riding on public lands. A local OHV dealership loans us motorcycles at no charge for the training.

Colorado Division of Wildlife

The BLM works with the **Colorado Division of Wildlife (CDOW)** on a number of high profile, very productive conservation efforts.

Over the past six years, the CDOW Habitat Partnership Program (HPP) has funded approximately \$350,000 worth of vegetative treatments (roller chopping, brush hogging, prescribed fire, seedings, etc.) in the NCA. These projects helped to improve big game habitat conditions, meet Landscape Health Standards on over 40,000 acres of public lands, and mitigate game damage incurred on adjacent private lands.



The NCA regularly assists CDOW on its annual Gold Medal Fishery survey, fish stocking, and river monitoring. We also coordinate on user education efforts to reduce whirling disease impacts, re-establish

a rainbow trout fishery in the Gorge, and reduce conflicts between boaters and fishers. Our NCA LEO and seasonal river rangers conduct joint river patrols with CDOW to conduct compliance checks on anglers in the canyon.

In 2007, BLM assisted CDOW in designating an additional 7 miles of Gunnison River in the NCA as a Gold Medal Trout Fishery. The river rangers installed new CDOW Gold Medal fishing regulations signs at all river access points and increased contacts with fishers to inform them of the changes. New NCA trailhead signs incorporate CDOW regulations and information.

Our LEO and recreation staff partner with CDOW officers for compliance checks during the hunting season. We also work closely on implementing, monitoring, and enforcing seasonal road and area closures to protect sensitive species and big game winter range on the NCA's remote east side.

Colorado Department of Corrections

UFO and the NCA partner with the **Delta Corrections Center (DCC)** to fund a year-round, 8-person inmate crew and supervisor that assists us on numerous resource projects. Since 2000, the crew has contributed an average of \$50,000 a year in labor on NCA projects.

2007 NCA projects include: construction, installation and repair of steel NCA portal and directional signs; maintenance of range and wildlife improvements (i.e., sage grouse and bighorn sheep guzzlers, fences, exclosures, etc.); invasive weed control; trash dump clean-ups; and annual and routine repair and maintenance of developed and dispersed recreation sites (kiosks, restrooms, trailheads, OHV staging areas, campsites, etc.).

The crew also completed two new resource protection fence projects in the NCA: 1) 2-mile fence that delineates the north boundary of the OHV Recreation Area



and separates Open and Limited areas along Peach Valley Road; and, 2) Extension of a rail fence along Peach Valley Road to reduce trash dumping and keep vehicles from driving off-road in a high-use area.

Both projects enhance visitor awareness of new OHV designations and provide additional protection of Mancos Shale soils and vegetation.

At least 30 percent of the crew's time is spent cleaning up large dumpsites and litter in the NCA. On average, the crew picks up over 1,200 cubic yards of household trash a year in the NCA. The crew is crucial to protecting outstanding scenic and sensitive resource values and providing safe and enjoyable visitor experiences.

Delta & Montrose Counties

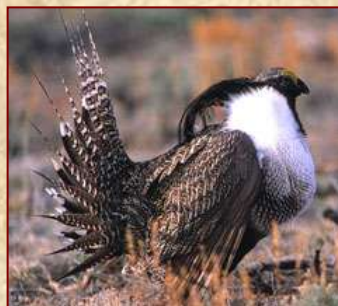
BLM maintains a very productive working relationship with representatives from **Montrose and Delta Counties**. In September 2006, we completed and signed a MOU with the Delta County commissioners to work on a number of NCA and UFO projects.

The Counties assist with road improvements and emergency maintenance for key NCA access routes. This year, we signed a road maintenance agreement with Delta County which will address critical access concerns in the northern part of the NCA and save BLM thousands of dollars in road maintenance annually.

We continue to work closely with Delta County on many Gunnison River management issues including: acquisition and development of boating and angling access sites, landowner and trespass issues, and conservation plans.

The NCA also partners with Delta County on large-scale invasive weed eradication projects. This year, we successfully treated over 400 acres of weeds in the NCA. Delta County provides labor, inventory, coordination, training, supervision, and equipment for these efforts.

The NCA manager is a member of the Delta County Tourism Cabinet and works with local and regional Chambers of Commerce and tourism providers on numerous projects including: developing maps and interpretive signs, visitor information and education, cultural heritage workshops and projects, and scenic byways programs.



Crawford Sage Grouse Partnership

The **Crawford Sage Grouse Partnership**, composed of a diverse group of rangeland users; general public;

landowners; academia; private organizations (environmental groups, sportsman groups, etc.); and local, State, and Federal agencies; was instrumental in the designation of the NCA's 22,400-acre Gunnison Sage Grouse ACEC/Important Bird Area.

The Crawford group's **Gunnison Sage Grouse Conservation Plan** was incorporated wholly into the NCA's RMP and provides adaptive management guidance for the ACEC.

The Partnership's mission is to maintain or increase sage grouse numbers and distribution while maintaining current users and healthy landscapes. The partnership has been very successful in funding habitat improvement and restoration projects, environmental education products, increased monitoring; and mitigating permanent loss of habitat through land exchanges, conservation easements and other practices.

This year's work included the maintenance of sage grouse guzzlers, habitat monitoring, and coordination with partners on the USGS elk movement and sage grouse habitat monitoring study.



Guzzler in the Gunnison Sage Grouse ACEC

Black Canyon of the Gunnison National Park, BOR & WAPA

The NCA continued its work with the **Black Canyon of the Gunnison National Park** on cooperative conservation issues involving customer service, visitor management, and use compliance.

We team up with NPS on backcountry patrols, visitor services and user education, OHV trail monitoring, tamarisk removal, campsite management, resource protection projects, signing, and search and rescue events. BLM river rangers cross-train with NPS rangers and interpretive specialists to ensure seamless management and visitor services. BLM and NPS coordinate on a joint annual Visitor Guide.

The NCA recreation planner was an ID Team member for the Park's 2007 Backcountry Management Plan.



BLM cadastral staff also assisted the NPS in surveying the Park's northern Wilderness boundary in the Gorge river corridor. We also work with NPS on

land tenure adjustments, LWCF proposals, water rights issues, special area stipulations, sage grouse habitat protection and rangeland issues.

Other cooperative partners in river corridor and Wilderness management are the **Bureau of Reclamation (BOR)** and the **Western Area Power Administration (WAPA)** which administer the upstream Aspinall Operations Unit near Gunnison, Colorado. The Unit controls flows in the Gunnison River. BLM attends quarterly meetings with BOR to discuss river flow needs for fish stocking, dam maintenance, flushing flow releases, and NCA/NPS visitor safety concerns.

The NCA manager and UFO realty staff have also been working closely this year with the BOR and the **Tri-State Energy Transmission Company** and the **Delta-Montrose Electrical Association (DMEA)** on a number of large-scale energy, irrigation, and salinity reduction projects that affect NCA scenic and natural resources.

Non-Profit Organizations

North Fork River Improvement Association (NFRIA)

This 400+ member, diverse group of boaters, business people, families, ranchers, water users, environmentalists, and scientists work on large-scale river restoration projects in the North Fork area.



NFRIA projects, funded by grants, local support and fundraisers, include riverbank stabilization projects, tamarisk control, fisheries and riparian enhancements, and low-head dam removal.

NCA river rangers assisted NFRIA with the 2007 National Rivers Week awareness float. This year's 200+ person float and river cleanup was a great opportunity to outreach with local boaters and river enthusiasts.

Montrose-Delta Public Lands Partnership (PLP)

This diverse partnership of city, county, state and federal agencies representatives, land-owners, business owners, special interest groups, and general public plays an active role in NCA management. The group's mission is to facilitate discussion and provide recommendations to BLM, USFS, NPS, CDOW and other agencies on land management issues by hosting quarterly meetings, special forums, and field trips.



In 2007, PLP helped coordinate a series of six public meetings on the proposed Dominguez Escalante NCA.

The UFO manager gave presentations and answered questions at meetings about Gunnison Gorge NCA management and the proposed NCA. BLM also hosted a PLP float trip on the lower Gunnison River for members to learn more about the area and discuss management issues.

Western Slope 4Wheelers



The group's mission is to promote the interests of family four-wheeling and participate in and support civic activities for the betterment of the community and public lands.

This spring, the group worked with the OHV crew to sponsor an Adopt-A-Trail ride on the NCA's popular Wave-Eagle jeep trail. Members picked up trash, installed signs, and created barricades to prevent ATVs and full-sized vehicles from getting onto single-track motorized routes.

The group and BLM are working on a number of other projects that the group can do in the NCA that will help BLM better manage motorized uses and promote responsible use by all NCA visitors.

Chaco Sandals Volunteers

This year the NCA also partnered with the employees of Chaco Sandals on two volunteer projects in the NCA. In celebration of National Fishing and Boating Week, the group assisted the river rangers in conducting campsite and weed inventories and cleanup of dispersed river campsites within the Gunnison River Special Recreation Management Area (SRMA).

In September, Chaco volunteers assisted in a National Public Lands Day event removing tamarisk along a proposed new trail route in the SRMA.

Chaco Sandals is based in nearby Paonia, Colorado. Chaco volunteers are committed to working with the BLM and other partners, such as the North Fork River Improvement Association, on resource enhancement projects that make a positive impact in local communities and beyond.



Other Partners - Other NCA partners include members of local non-profit environmental, OHV, equestrian, boating, angling, and other sporting organizations. These groups have very diverse and sometime competing or opposite missions (i.e., Wilderness protection vs. multiple use) which adds to the complexity of our work with them. The primary groups we work with in the NCA include:

Additional NCA Partnerships

The Access Fund Center for Native Ecosystems Chaco Sandals Volunteers Colorado Environmental Coalition Colorado Mountain Club Colorado Off-Highway Vehicle Coalition Colorado Plateau Mountain Bike Association Colorado River Outfitters Assoc. Delta & Montrose County Search & Rescue Trout Unlimited Gateway Youth Grand Junction Boy Scouts Grand Canyon Private Boaters Association North Fork River Improvement Association North Fork Trails Network High Country Citizens Alliance	Montrose, Delta, Crawford & Olathe schools Montrose High Dirt Bike Club Montrose Model Aircraft Association Montrose Recreation District Motorcycle Trail Riders Association Southern Rockies Conservation Alliance Thunder Mountain Wheelers Uncompahgre Valley Trail Riders Volunteers for Outdoor Colorado Western Colorado Congress Western Slope Four Wheelers Western Slope Environmental Resource Council The Wildlife Society Southwest Resource Advisory Council Surface Creek Saddle Club
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Volunteer Accomplishments

In 2007, 364 volunteers from local schools, non-profit groups, businesses and sporting groups contributed over 3,652 hours of work on projects in the NCA. Hosted workers from Delta Corrections Center added another 2,876 hours of work for a total of 6,528 contributed hours valued at \$122,530. For the purpose of the annual BLM Volunteer Report, volunteer labor is valued at \$18.77 per hour; although most of the work would be much more expensive if done by private companies and contractors.

The table summarizes 2007 volunteer work which included: tamarisk control, river patrols, cleanups, archeological studies, and site stewardship, campsite rehabilitation, travel management, signing, use monitoring, environmental education, public access enhancements, riparian improvements, tourism information and outreach.



	VOLUNTEER/ HOSTED WORKERS	VOLUNTEER HOURS	HOSTED WORKER HRS	VALUE WORK HOURS	FUNDS EXPENDED
2007 Gunnison Gorge NCA Volunteers & Hosted Worker Report					
Weed/tamarisk treatments	46	320		\$ 6,000	\$ 1,540
Montrose Public Lands Front Desk Volunteers & Montrose/Delta Co. Tourism Boards Hospitality Training	42	400		\$ 7,500	\$ 500
River patrols, campsite cleanups, toilets & trails	48	380		\$ 7,130	\$ 1,500
Western Wyoming College students – Gunnison River Rock Art Shelter project	5	460		\$ 8,650	\$1,500
OHV patrols - trail maintenance & cleanup of recreation sites	51	325		\$ 6,100	\$ 600
Delta crew - fence building, dump cleanups, weed removal, wildlife & range improvement projects.	290		2876	\$53,980	\$ 4,700
Environmental Education Projects, National Rivers Week, NPLD, Earth Day, "Living Classrooms" field trips, trash cleanups, riparian enhancement projects, tourism outreach	172	1,767		\$ 33,170	\$ 2,500
Total	654	3,652	2,876	\$122,530	\$12,840.00

6. FY 2007 Business Practices

Annual Expenditures & Work Months

Gunnison Gorge NCA/Wilderness Funding and Work Month Summary

Total allocated federal funding available for labor and project work in the Gunnison Gorge National Conservation Area in FY 07 was **\$784,375**. This allocation, as shown in **Table 1**, is composed of \$409,400 of base funding and \$374,975 of one-year flexible funding.

Table 1. BLM Allocation FY 2007	
Base NCA Funding - Labor and Operations	\$ 409,400
One Year Flexible Funding - Labor and Operations	\$ 355,000
TOTAL NCA BUDGET	\$ 764,400

One-time funding is a combination of additional funds directed to various programs by State and Washington Offices and funding of requests for special projects submitted by offices via the Bureau's Budget Planning System (BPS).

Table 2 shows total work months and cost figures for permanent and seasonal NCA and UFO staff funded by NCA funds. It is important to note that although NCA funding does extend across the NCA and UFO, it by no means covers all the work done in the NCA.

Approximately \$100,000 of UFO base and one-time funds are used each year to fund NCA-related labor, vehicles, procurement, and support costs not covered by the NCA budget. This year, for example, the UFO covered \$20,000 in funding for two of the Gunnison Gorge seasonal river rangers. In the past, the NCA base budget was adequate to cover these positions.



Table 2. FY 2007 GGNCA Budgeted Staff Permanents & Seasonals		
Work Months & Funding <i>(10 wms = 1 work year)</i>	Work Months (wms)	Funding (\$ K)
NCA Staff		
Permanent Staff (NCA Manager, LEO, Recreation Planner)	30.1	192.8
River Rangers - 4 seasonals ¹	13.1	52.1
OHV Crew - 2 seasonals ²	2.0	6.5
Visitor Services - 1 seasonal ³	3.6	14.4
Total for NCA Staff	48.8	265.8
UFO Staff Support Funded by NCA		
Biological & GIS	12.3	52.8
Lands & Minerals	11.1	47.6
Admin. & Mgt Support	10.1	43.5
Maintenance	8.3	35.6 k
Totals for UFO Staff	41.8	\$ 179.5
TOTAL	90.6	\$445 K
¹ Positions funded also by UFO funds & fees. ² Positions funded primarily by contributed funds. ³ Position funded also by Gunnison Gorge fees.		

Major NCA Expenditures

Item	Cost
<i>Labor</i>	\$ 445,000
<i>Travel & Training</i>	\$ 18,300
<i>Supplies/Materials</i>	\$ 121,700
<i>Vehicles</i>	\$ 45,900
<i>Contracts, Services & Agreements</i>	\$ 133,500
TOTAL	\$ 764,400

Our major expenditures in 2007 are shown in the table above. The labor costs include surcharges, benefits, administrative overhead, etc. Materials and supplies purchased included: boulders, fence posts and other materials used for resource protection projects; weed control equipment; facility maintenance needs (trash bags, lumber, toilet paper, rental equipment, etc.); visitor services (displays, signs, etc.); vandalism repair; and law enforcement equipment.

Contracts and services included: funding front desk positions; toilet pumping; law enforcement details; Delta Corrections Crew support, GeoCorp internship; and interpretive, graphic design and mapping services.

2007 Special Recreation Permit Receipts

GGNCA Recreation Receipts	Recreation Visitors	Fee Receipts \$
1. Wilderness SRP Fees	7,300	\$ 29,800
2. Commercial SRP fees	3,500	\$ 30,200
TOTALS	10,800	\$60,000

Gunnison Gorge Special Recreation Permit (SRP) fees for Wilderness use and commercial outfitting provide cash receipts that stay in the NCA for immediate use. Wilderness permits are required for all private and commercial boaters and walk-in users 16 years of age and older.

Day-use fees are \$3/ person; camping fees are \$10/person for one night; \$15/person for two nights. Annual day-use passes are \$15. Volunteers earn free annual passes by working a minimum of four hours on a resource protection or education project. FY 2007 revenue from individual Wilderness SRPs totaled \$29,800.



We manage 22 commercial SRPs for a variety of uses including: whitewater boating, float-fishing, horse packing, jet boat use, and vehicle shuttles. We collect 3 percent of gross income from commercial SRPs, which this year totaled \$30,200.

Total fee receipts in 2007 were up 29 percent from 2006 due primarily to higher river flows and high visitation in June for the annual stone fly hatch.



Major uses of receipts: road and facility

maintenance; horse pack-ins and vehicle shuttles for river patrols; swift water rescue and EMT training, vehicle and per diem costs; resource monitoring; equipment; and volunteer support for resource protection projects.

Fees also support environmental education efforts and outreach events such as National Public Lands Day, National Rivers Week, etc. Wilderness fees are used to purchase Wag-bags for packing out human waste in the Gorge. Wag-bags are provided to the visiting public at no additional charge. Visitors are complimentary about the bags that help reduce sanitation problems in the river corridor. Details on collection and use of NCA fees can be found in

our annual fee report to Congress. We have submitted reports since 1999.

Contributed Funds

Projects, funding and in-kind contributions from partners, friends groups and volunteers are described in the **Environmental Education and Resource Interpretation** and **Cooperative Conservation** sections of this report.

The table summarizes major partner funding and in-kind contributions and the projects they contributed to in the NCA in 2007.

Land Acquisition Projects



We are currently working with The Colorado Conservation Fund on a number of Land and Water Conservation Fund (LWCF) projects for acquisition of private land inholdings and conservation easements to protect scenic and sensitive resources; enhanced public access and recreation; and improved resource management.

CONTRIBUTED FUNDS & IN-KIND SUPPORT FY 2007	
Colorado State Parks - OHV grants for crew, signs, training , management support	\$ 62,000
U. S. Geological Survey – Mancos Shale Landscapes Project	\$ 60,000
State of Colorado Department of Corrections – Delta Corrections Crew hosted worker supervision, training and labor	\$125,000
Delta County Weed Board – tamarisk, knapweed, and other invasive weed control	\$ 15,000
Western Wyoming College – Gunnison Rock Art Site testing	\$ 15,000
Geographic Society of America (GSA) GeoCorp intern position administration and stipend– Eagle Valley Living Classroom Project	\$ 5,000
Delta County Tourism Cabinet – printing of tourism brochure with NCA maps & info, cultural heritage tourism project, joint Delta & Montrose County hospitality training workshop	\$ 8,000
TOTAL Contributions	\$290,000

